

REMARKS

Claims 1-12, 14, 15 and 24-26 are present in this application, and all claims stand rejected under 35 USC 103(a) as unpatentable over Blackwell et al., U. S. Patent No. 5,288,541 in view of Iwanaga et al., U. S. Patent No. 6,033,742. This rejection is traversed. More specifically, this rejection is traversed on the grounds that neither Blackwell nor Iwanaga describes a structure comprising a patterned metal foil as that term is used in the present claims.

As noted in the Response to the previous Office Action, present claims 1-11 are directed to a backplane for use in an electro-optic display, the backplane comprising a patterned metal foil having a plurality of apertures extending therethrough, coated on at least one side with an insulating polymeric material and having a plurality of thin film electronic devices provided on the insulating polymeric material. A typical dictionary definition of “foil” is “a very thin sheet or leaf of metal” (taken from Webster’s New Twentieth Century Dictionary”, Collins World, 1976). Whatever the exact words used to define “foil” it is surely inherent in the term that the foil be continuous in the topological sense. Indeed, it is difficult to see what meaning could reasonably be given to “patterned metal foil” if the foil were not continuous, so that the material surrounding the apertures is connected and coheres together as a continuous layer. Furthermore, it is noted that Paragraphs 13-18 of the specification state that metal foil based substrates are used in backplanes to provide excellent handling properties due to the material’s strength, flatness and conductivity (see the last sentence of Paragraph 17). Such properties would not be provided unless the metal foil is continuous and mechanically coherent.

Blackwell does not describe any structure which has, *at the same time*, a patterned metal foil having a plurality of apertures therein, a coating of an insulating polymeric material on at least one side of the metal foil and thin film electronic devices on the polymeric material, as required by the present claims. In Blackwell, despite what might appear from Figure 1(d), there is no single metal foil, but rather a series of isolated conductive leads 270 as shown in Figure 1(e) or 1(f) prior to the placing of the chip 280

on to these leads 270, as shown in Figure 1(g). Obviously, it would make no sense to have the metal layer on the upper surface of the polyimide layer continuous except for the apertures 50 since this would simply short out all the contacts on the chip 280. Although there is no illustration of the exact form of the metal layer on the lower surface of the polyimide, it appears that this metal layer is patterned in the same way as the upper one; see column 10, lines 4-6 of Blackwell. While it may be true that at some earlier stage in the production of the Blackwell structure, a continuous metal layer may be present, at this earlier stage no electronic devices are present in the structure, since such electronic devices are present only after bonding of the chip 280 on to the leads 270, after the metal layer has been patterned to form the leads 270. Thus, as already noted, Blackwell does not describe any structure which has, at the same time, a patterned metal foil, a coating of an insulating polymeric material and thin film electronic devices on the polymeric material.

Furthermore, a person skilled in the art would have no reason to modify Blackwell to incorporate a patterned metal foil, and every incentive not to do so. As already noted, replacing the discrete leads 270 with a continuous foil would short the contacts of the chip 280 rendering the chip unusable.

For the foregoing reasons, Blackwell and Iwanaga do render any of the present claims obvious.

For the foregoing reasons, the 35 USC 103 rejections set out in the Office Action are unjustified and should be withdrawn. Reconsideration and allowance of all claims remaining in this application is respectfully requested.

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Since the prescribed period for responding to the Office Action expired July 28, 2009, a Petition for a two month extension of this period is filed herewith.

Respectfully submitted
/David J. Cole/
David J. Cole
Registration No. 29629

E INK Corporation
733 Concord Avenue
Cambridge MA 02138

Telephone (617) 499-6069
Fax (617) 499-6200
E-mail dcole@eink.com